



ARTS2455

; YbXYf']b `7 \]bU

HYfa `H\ fYY` ##`&\$&\$

7ci fgY`Cj Yfj]Yk

GHJZ`7cbHJW`8YHJ]`g

7cbj Ybcfg

B Ua Y	9a U`	5j U]`UV]`]m	@cW]h`cb	D\cbY
DUb`K Ub[DUb`k Ub[4 i bgk "YXi "Ui			

7ci fgY'8YHJ]`g

7fYX]hDc]bhr`*`

Gi a a UfmicZ`h`Y'7ci fgY

H\]g`Wci fgY`YI d`cfYg`h`Y`XfUa Uh]WWXUb[Yg`hc`[YbXYf`UbX`gYI i U`]mibcfa g`YI dYf]YbWwX`VmdYcd`Y``j]b[]b`7\]bU`cf`cdYfU]b[]b`h`Y`G]bcd\cbY`k`cfX``H\Y`Wci fgY`YI Ua]bYg`h`Y`hfUbgZcfa Uh]cb`]b`h`YgY`fYU`a g Zca`ja dYf]U`h`ja Yg`h`fci [\`h`c`h`Y`W`ffYbhYfU``#ig\ck g`h`Y`cb[c]b[`h`Ybg]cb`VYhk`YYb`dcdi`Uf`]XYUg`UVci h ffUX]h]cbf]UbX`f`a`cXYfb]mf]Ug`[YbXYf`UbX`gYI i U`]mibcfa g`UbX`dfUW]Wg`\Uj`Y`WwUb[YX`cj`Yf`h`ja`Y``#h`YI Ua]bYg`]b`h`Yf`Yb]h]cbg`Vm7\]bUf]j`Uf]ci`g`[cj`Yfba`Yb]h]UbX`Y[U`gmg]h`Ya`g`UbX`WJa`dU][`bg`VmUW]j`]g]h]g`UbX`fYZcfa`Yfg`hc`WwUb[Y`h`Y`g]h]g`g`ei`c`Ug`k`Y``Ug`h`Y`i`gY`cZgYI`UbX`[YbXYf`VmWwYU]h]`Y`Uf]h]g]h]k`f]h]Yfg`UbX`UXj`Yf]h]g`Yfg``Mci`k`]``YUfb`UVci`hd\Ybca`YbU`gi`Ww`Ug.`dfc[fYgg`hc`k`UfXg`gYI`Yei`U`]m]h]h]Ybg]cbg`VYhk`YYb`]bX]j`]Xi`U`XYg]fYg`UbX`ZJa`]midfYggi`fYz`@6;`H=W`h`i`fY`UbX`f][`h]g]z`gcW]U`]gh]WwU`Yb[Yg`hc`hfUX]h]cbz`7\]bYgY`a`UgW`]b]h]Yg`UbX`ZYa`]b]b]h]Yg`]b`cWw`UbX`[`cVU`Wc`bh]h]h]g]z`X]j`Yfg]m]b`[YbXYf`UbX`gYI i U`]mibcfa g`Ua`cb[`7\]bUf]j`bcb!<`Ub`Y`h`b]W]h]Yg`UbX`X]ZYfYbh]gcW]U`WUggYg]z`W`ffYbhWwU`Yb[Yg`]b [YbXYf`UbX`gYI i U`]mibcfa g`]b`fY`Uh]cb`hc`d\Ybca`Ybcb``]Y`ZJa`]miZcfa`Uh]cbz`Ya`d`cma`Yb]h]z`dc`]h]Ww`

5ggYgga Ybh

8YHU]YX]bgfhi Wjcbg ZcfYUW UggYgga YbhHUg_k j"VY'i d'cUXYX'hc'A ccX'Y"F YZYf'hc'UggYgga YbhVf]YZ'

5ggYgga YbhHUg_g'

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH'	Gh XYbh@YUfb]b[Ci hWca Yg'5ggYggYX
DfYgYbhUH]cb'Z' HfUbgW]dh	' \$	(da 'cb'dfYgYbhUH]cb'XUm	%z&Z ž(ž)
DYfgcbU'`bhfdfYUH]cb'	&\$	(da 'Hi YgXUm]b'K YY_+'	%z&Z ž(ž)
K f]h]b['HUg_') \$	(da ' : f]XUm]b'k YY_`%\$	%z&Z ž(ž)

5ggYgga Ybh8YHU]`g

5ggYgga Ybh% 'DfYgYbhUH]cb'Z' HfUbgW]dh

GHUfhXUH'. 'K YY_`&

8YHU]`g.

Gh XYbh]k j"dfYgYbhH]Y]f'i bXYfghUbX]b['UVci hU'gY'ZgY'YWHX'WUgY'fY'UH'X'hc'h'Y'k YY_`f'X]gW gg]cb
hc]d]W'H\Ymk j"VY'Ug_YX'hc'dfca dhX]gW gg]cb'Zcf'h'Y]f'dYYfg"H\Y'ZYXVUW_k j"VY'dfcj]XYX'j]U'U'F i Vf]W
Zcf'DfYgYbhUH]cbg'W ffYbhm]b'i gY]b'5g]Ub'Gh X]Yg'Wci fgYg"

@Yb[h. ') 'hc'%'\$'a]bi H'g

C fU'ZYXVUW_''

Gi Va]gg]cb'bchYg.Mci 'WU]b'YX]hmc]i f'dfYgYbhUH]cb'UbX'h'Y'f'UbgW]dh]b'DDH'UbX'gUj Y']hUg'U'D8: 'Z]Y'Zcf
Z]bU`gi Va]gg]cb"

Hi fb]h]b'gYH]b[. H\]g'Ugg][ba Ybh]g'gi Va]H'X'h'fci [\ 'Hi fb]h]b'UbX'gh XYbh]g'WU]b'gYY'Hi fb]h]b'ga]Uf]hm
fYdcf]g"

5ggYgga Ybh&. 'DYfgcbU'`bhfdfYUH]cb

GHUfhXUH'. 'Bch5dd']WU]V'Y

8YHU]`g.

Gh XYbh]k j"gi Va]hU'dYfgcbU']nYX'UggYgga Ybh'hc'g\ck WUgY'h'Y]f'i bXYfghUbX]b['UVci h[YbXYf']b'7 \]bU"
H\]g'UggYgga YbhWU]b'VY]b'h'Y'Zcfa 'cZg\cfhYggUnž]XYcž'XcW a YbhUfnž'dcgh'fž'dcXWU]ghž'Y'h'bc [fUd\]W
]bh]fj]Yk ž'k YVg]h'cf'Ubmich'Y'f'Zcfa U]g'" Gh XYbh]g'g\U'X]gW gg'h'Y]f'dfcdcgU'g'k]h'h'Y'YWH'fYf'UbX
cVU]b'dYfa]gg]cb'VY'ZcfY'gi Va]h]b['h'Y'UggYgga Ybh'

C fU'ZYXVUW_''

Gi Va]gg]cb' bchYg. D'YUgY' WēbUWWh' h'Y' h'UW']b['ghUZZ]Zmēi 'UFY' i' bUV'Y' hē' gi Va]h' h'Y' W'cgYb' Zēfa Uhiē
h'Y' Ugg][ba YbhVcl']b' A ccX'Y

Hi fb]h]b' gYh]b[. 'H\]g']g' bchiU' Hi fb]h]b' Ugg][ba Ybh

5ggYgga Ybh' . 'K f]h]b['hUg_

GhUfhXUHY. 'Bch5dd']WV'Y

8YhU]g.

Gh XYb]g' k]' \Uj Y' h' c' cdh]cbg' Zēf' h'Y' hUg_ " 'C dh]cb' %']g' U' WU' " &ž(\$\$!k cFX' fYgYUfW' YggUm' 'Gh XYb]g' k]' 'VY
Ug_YX' hē' gY' YW' h'U' fYgYUfW' 'ei Ygh]cb' Zēca' 'U' bca']bU' h'X' ']g' h' 'H\Y']f' hUg_]g' hē' ['U' h'Y' f' fYgYUfW' 'a' U' h'Y' f']U' gž
Wēbglfi W' h'U' WY' Uf' UbX' 'c[]W' 'Uf[i' a' YbhUfci' bX' h'Y' fYgYUfW' 'ei Ygh]cbž' Vi' h'Y' g' g' h']g' Uf[i' a' Ybhk']h'
Yj]XYbW' 'UbX' Wēa' a' i' b]WU' h']b' U' WY' Uf' k' f]h]b' ZUg\]cb' " 'H\Y' Yj]XYbW' 'k]' 'VY' 'dfYgYbh' X']b' Zēfa' U' 'UWUXYa']W
bc' hU]cb' UbX' XcW' a' YbhU]cb' " 'C dh]cb' &']g' U' W' h'U' fYZYW' h]cb' cZ' h'Y' Wēi' fgY' " 'H\]g' hUg_]g' Yei']j' U' Ybhē' h'Y'
fYgYUfW' YggUm]b' h'Y' fa' g' cZk' cFX' 'Yb[h' " 'Gh XYb]g' k]' 'k' f]h' Y][\h' '\$\$!k cFX' W' h'U' fYZYW' h]cbg' Vm' h'Y' YbX
cZ' h'Y' h'Y' fa' 'hē' X' Ya' cbgh' U' h'Y' h'Y' f' i' bXY' fgh' UbX']b['UVci' h' h'Y' 'k' YY_ 'm' hēd']WUbX' fYUX']b[g' " 'H\Y' 'k' f]h]b['hUg_]g'
h'Y' Z]bU' 'UggYgga Ybh' Zēf' U' h'Y' bXUbW' 'di' fdcgYg"

K f]h]b' ZYXVUW_ "

Hi fb]h]b' gYh]b[. 'H\]g' Ugg][ba Ybh]g' gi Va]h'Y' h' fci [\ 'Hi fb]h]b' UbX' gh' XYb]g' WUb' gY' Y' Hi fb]h]b' g]a]' Uf]m
fYdcfg"

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

F YZf'hc`k YY`mfYZfYbWg`UbX`@Y[Ubhc`fYUX]b[``]gh]b`A`ccX`Y`

F YWca a YbXYX`F Ygci fWg

9Xk UfXgž`@`&\$\$, ž9 W VWd Ba`f[Uel`S` V 6W_ aUdSuk, I a_ W e EgXcSYW[5Z[SžGHJbZcFXž75žGHJbZcFX
I b]j Yfg]mDfYgg"

9j Ubžž`<`"%- +žI a_ W S` V eW]gS`fk [5Z[S, Va_ [S` fV[eUagdeWé aXXW_ S`WeW]gS`fk S` V YW VWd
e[UW#+&+ž7 Ua Vf]X[Y.`Dc`]mDfYgg"

A Ubbž`@`G`&\$%ž9 W VWdS` V E W]gS`fk [? aVWd 5Z[WeW: [efackž7 Ua Vf]X[Y.`7 Ua Vf]X[Y`I b]j Yfg]m
DfYgg"

Gcb[; Yb[`UbX`<]fXž8`" &\$%(ž? W S` V ? SeUg`f [fWé [5a`fW_ badSck 5Z[Sž@Y]XYbžBYhYfUbXg.`6f]`"

K Ub[`DUb`&\$%) ž>ahWS` V ? Sdd[SYW[9`aTS`f [Y 5Z[Sž5V]b[XcbžCI cb`/BYk`Mcf_`.F ci hYX[Y"

NUb[`L]Uck Y]UbX`N\Uc`L]Uc`@`fYXgŁ&\$% ž: S` VTaa] a` fZW8S_ [k S` V ? Sdd[SYW[5Z[Sž9Xk UfX
9`[Uf"

7ci fgY`9j U`i Uh]cb`UbX`8Yj Y`cda Ybh

H\]g`Wci fgY`k]`VY`Yj U`i UH`X`j]U`h`Y`a m9I dYf]YbW`gi fj Ymg`Uh`h`Y`YbX`cZ`h`Y`h`fa " `Zmci `Uj Y
gi [[Ygh]cbg`cb`k Ung`hc`]a dfcj Y`h`Y`Wci fgY`Xi f]b[`h`Y`h`fa žd`YUgY`ZY`ZY`h`c`Wca Y`UbX`h`_`hc`i`g`K`Y
k Y`Wca Y`mci f`ZYXVUW`"

5 WUXYa]W< cbYgmiUbX`D`U[]Uf]ga

D`U[]Uf]ga `]g`i`g]b[`h`Y`k`cfXg`cf`]XYUg`cZc`h`Yfg`UbX`d`fYgYbh]b[`h`Ya`Ug`mci`f`ck`b``#WUb`hU`_`Y`a`Ubm
Zcfa`gZ`Zca`X`Y`]VYfU`h`V`X`Y`U`h]b[`h`c`U`W`W`X`Y`b`h`U`m`i`W`c`d`m]b[`Z`ca`U`g`ci`f`W`k`]h`ci`h`U`W`_`b`ck`Y`X[`Ya`Y`b`h`

I`B`G`K` `[`f`ci`d`g`d`U[]Uf]ga `]b`h`c`h`Y`Z`c``c`k`]b[`W`U`h`Y`[`c`f]Y`g.

- i bXYfghUbx'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wcdmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5W'WdhUV'Y'I gY'cZ I BGK '⇒H'F Ygci fW'g'Dc`]Wn
- VY'Uk UfY'cZh'Y'ghUbxUfXg'cZVY\Uj]ci f'YI dYW'X'cZYj Yfmcby`]b'h'Y'I BGK 'Wca a i b]m
- `cWJh'gYfj]W'g'UbX']bZcfa Uh'cb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZh'YgY'UfYUg'k]`VY'ZJa]]Uf'hc'mci ž'ch'Yfg'k]`VY'byk "; U]b]b['U'gc`X'i bXYfghUbx]b['cZU`h'Y fY'UH'X'UgdYW'g'cZ9@G9'k]`Y'd'mci 'a U_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\hd. #gj V'YW'f i \]XYg" \]VfUfm'i bgk "YXi "Ui #` \]gY#JVci h' \]gY](#)

5 WUXYa]W=Zcfa Uh]cb

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`tc.

- fYei Yg]Zcf`YI H`bg]cb/
-